IN THE UNITED STATES DISTRICT COURT
FOR THE MIDDLE DISTRICT OF ALABAMA
NORTHERN DIVISION

CIVIL ACTION NO. 2:05-CV-527-F

GERALD RUHNOW and CONNIE RUHNOW,
Plaintiff,
vs.
LANE HEARD TRUCKING, LLC, et al.,
Defendants.

DEPOSITION
OF
CHRIS BLOOMBERG, P.E.
December 18, 2006

TAKEN BEFORE:
J. Ashley Young
Certified Shorthand Reporter,
Registered Professional
Reporter and Notary Public

COPY

EXHIBIT
D
Blumberg No. 9118

A. Michael Dorohoff. It's D-o-r-o-h-o-f-f.

Q. He works with you?

A. Yes.

Q. And what is his function when y'all go to a scene -- this scene together?

A. Surveying work is typically a two-man job, so he's assisting me in, you know, whatever help I need.

Q. All right. And when you say "surveying work," what do you mean?

A. Taking surveying equipment and surveying the layout of the roadway, any roadway evidence, essentially whatever we want to measure.

Q. Okay. And when you say "surveying equipment," are you talking about the tripod with the lens on it that you can -- that kind of surveying equipment?

A. Yes.

Q. All right. And with that, can

you get distances?

A. Yes.

Q. Is that the main reason that you have it and use it?

A. The main reason is to document the road and the available evidence.

Q. I guess you can get elevations too?

A. Sure.

Q. And did y'all use that equipment out there?

A. Yes.

Q. Did you -- or were you able to determine, at least in your opinion, where the initial impact occurred between Michael Duke's truck and the motorcycle?

A. Yes.

Q. Did you use your surveying equipment to determine -- strike that.

Did you attempt to determine at what point -- strike that too.

Did you use that equipment, Mr. Bloomberg, to determine the distance

from what I will call the crest of the hill back towards Montgomery, north of the accident scene, to the point of impact?

A. I'm not sure how far back we surveyed. I'd have to look at the survey data. Typically we'd go a thousand feet either direction so probably so.

Q. Do we have the survey data?

A. We've got a printout of it. I don't have the raw data.

Q. Okay. Can you look at that and tell me how far back y'all surveyed?

A. No. I mean, this is more showing the gouge marks, tire marks, and area of impact.

Q. All right. On the day that you were there, what was the weather like?

A. My recollection is it was chilly in the morning when we were out there. I think it was -- it wasn't raining.

A. That's what the Alabama code is, as I understand it.

Q. That's what's required under the law?

A. That's correct.

Q. As an expert in this type of case, can you tell us how far most vehicles actually do illuminate as they travel down the road?

A. I mean, it varies based on how -- you know, how your headlights are --

Q. And I'm talking about low beams now, not high beams.

A. Correct. -- how they're calibrated and adjusted. I mean, typically, ycu know, maybe 100, 150 feet, somewhere in that range.

Q. And the reason I ask is as I drove down -- and I'm sure you're familiar with the drive from Birmingham to Mobile on I-65?

A. I am.

Q. Yes.
A. Sure.
Q. Okay. And I know you can see things that are more than a hundred feet in front of your car, can't you?
A. Such as? Can you give me an example?
Q. Well, no. I was going to ask you if you could give me an example of some things that you can see that are actually outside of that hundred-foot thing. Is there just -- there may not be anything. If you can think of an example --
A. If you've got something that's highly reflective, reflective tape, something like that. Beyond that, I mean, the dark -- you know, a dark object, you definitely have some limit on what you can see and especially not just -- you know, there's something there but nor be able to make out what it is.
Q. Okay. What is your

understanding, for purposes of your testimony in this case, what the visibility was the night of this wreck?

A. I think it was dark, I think there's documentation that it had been a light rain.

Q. Do you have an opinion as to whether or not on the night of this wreck a driver traveling in the area that Mr. Duke was traveling could see a reflective something more than a hundred feet in front of his truck?

A. The best I can do in this case thus far is look at what's required and what's typical of a vehicle, and that would be 100 to 150 feet.

Q. Could he see lights more than a hundred feet in front of him?

A. Sure. Sure.

Q. Why didn't he see the lights on the car and the motorcycle in this wreck?

A. I don't know if they were on.

Q. If they were on, as an expert in this type of thing and an accident reconstructionist, in your opinion, could he have seen more than a hundred feet away from the impact if he was looking?

MR. RIIS: Object to the form. Why don't you distinguish "if they were on" which "they" we're talking about.

Q. (BY MR. SPARROW:) The motorcycle and the car. Assume for purposes of this question that the car headlights are on.

A. Off the roadway?

Q. Off the roadway facing -- I believe the testimony is essentially due south, whatever -- parallel to the highway, whatever direction that is, and that the rear lights are on, that the red globes may be broken, but the bulbs themselves are on, and that both lights are on the motorcycle. Now, with that assumption, in your opinion, could a driver approaching the point of impact

see these vehicles more than a hundred feet away?

A. If the lights were, you know, pointing toward them or projecting in a distance away, you know, it's possible he could see those lights.

Q. Are you aware of what the state code requires from a visibility standpoint how far back you have to -- strike that.

What does the code require from a site distance standpoint for rear taillights? How far back are you supposed to be able to see under the code?

A. I don't recall.

Q. How far back, under the code, are reflectors supposed to be visible on either a motorcycle or a car?

A. I don't recall.

Q. Do you recall the testimony in this case by Gene Richardson? Do you remember which witness he was?

Mr. Bloomberg, as an expert in this kind of thing, that the lights at Pinkard's would illuminate the highway for some distance beyond the actual parking lot of the store?

A. You know, some distance. It also would provide backlighting which in some cases can inhibit what you can see. But, you know, like I say, it is 200 feet away. I don't think, you know, those lights can illuminate the road back there.

Q. And that was my next question. It's probably too far away to actually illuminate the road where all this took place?

A. Yes.

Q. A lot of your opinion is -- as far as I understand your opinion is you start with the hundred feet that's required by the statute, and then you figure feet per second based on whatever speed he was traveling, and then you

assign an assumed reaction time; correct?

A. A perception and reaction time, correct.

Q. I may be wrong because I haven't looked this up in a long time, but my memory is that feet per second is essentially 1.5 or 1.47, something like that; is that right?

A. 1.466.

Q. So if you're driving 50, just to make it easy, you're traveling about 75 feet per second?

A. Roughly.

Q. All right. And then as I understand, I've always kind of heard the rule of thumb for reaction time was three quarters of a second.

A. If you want to break it down, perception might be three quarters of a second, and reaction might be another three quarters of a second. Combined, it's usually about a second and a half for an anticipated-type situation.

Q. So when I was looking at your thing -- and I may be wrong -- I had about a two-second lag there, is that right, between feet per second and -- or maybe let me just ask you. Under those circumstances, you got the hundred feet. When do you -- what is your opinion, Mr. Bloomberg, of when Mr. Duke should have first seen what was going on in front of him on the highway?

A. I mean, the first time, I would think, you know, in this scenario would be 100 feet, maybe 150.

Q. Okay.

A. And that's, you know, an unanticipated event, looking, trying to figure out what this is in the road, if it is something, if it's a dog or if it's something that's more of a threat, this kind of a thing.

Q. So what's the reaction time there?

A. I mean, I'm using -- just in

these calculations, I'm using a second and a half which is kind of for more of an anticipated-type situation as opposed to a motorcycle lying in the middle of the road at night. It would probably be more in the order of two-plus seconds. But essentially there's so little distance available, I'm just, you know, using the second and a half.

Q. Plus a half second for the brakes to kick in. You said that a truck like this has some kind of lag time?

A. Correct. But, I mean, as you can see in the paragraph above that, I mean, even forgetting about the brake -- you know, the air lag, I mean, it has already exceeded 100 feet. It's already at 120 feet just for somewhat of a low perception and reaction time.

Q. In reaching your conclusions, did you -- strike that.

In reaching your conclusions, what assumptions did you make in regard

Mississippi code. Could you point to me the specific code section you're referring to in the Alabama code in the documents produced by your attorneys and show me the code section you're referring to that requires 100 feet -- light to shine 100 feet?

A. The printout that I have says Section 32-5-242.

Q. Okay. You don't know whether it's -- are you looking at the code section? Do you have it with you?

A. I've got it just printed out from the Internet.

Q. Okay. If you will, look at it. Is it -- are you referring to (b)(2)?

A. Yes.

Q. 3542, Subsection B-2?

A. Correct.

Q. Okay. Where it says, "There shall be a lowermost distribution of light," do you see that, the first

section on -- first sentence on paragraph 2?

A. Yes.

Q. -- "or composite beam so aimed and of sufficient intensity to reveal persons and vehicles at a distance of at least 100 feet ahead," does that mean your low beam should show 100 feet ahead?

A. Yes.

Q. Okay. What about your high beam?

A. Your high beam is in the section right above that saying 350 feet.

Q. 350 feet. So the low beam is to have 100 feet, the high beam should be a minimum of 350 feet; correct?

A. Correct.

Q. Is the Mississippi law the exact same distance?

A. It appears to be, yes.

Q. Okay. Do you know whether Mr. Duke had his low beam or high beam on at the time of the accident?

A. It's my understanding low beam.

Q. Okay. Where did you get that information from?

A. I believe his deposition.

MR. RIIS: Who, Mr. Duke?

A. I mean -- I'm sorry. I believe, just, you know, looking at the -- you know, he's got vehicles all around him. I don't think he'd be driving with his high beams on. But I don't think anybody has testified that he is.

Q. Do you know of any testimony that's been admitted -- or testimony so far that states whether Mr. Duke, the driver of the Lane Heard Trucking case, had his high beam or his low beam on?

A. I would have to look back at all the testimony about it. I don't believe there's anybody that said he was driving with his high beams on.

Q. Okay. So your report is just

assuming for the purposes of your report that his low beams were on; correct?

A. That's correct.

Q. Could you tell from your inspection of the vehicle -- of Mr. Duke's -- the Lane Heard truck after the accident, was there any way to tell whether the low beam or high beam was on at the time of the accident?

A. No.

Q. If, in fact, the -- Mr. Duke's high beams were on as opposed to his low beams at the time of the accident, how would that affect your calculations as to what his visibility would have been?

A. There would be more distance available to him.

Q. Do you know how much right now?

A. If you apply the minimum requirement, it's 350 feet.

Q. So the same calculations in your report we could do ourselves; is

that right? I'm looking on page 3 of your report, how you did it.

A. Right. Can you repeat your question?

Q. Yeah. If we used the 350 feet as opposed to the hundred feet, we could do the calculations ourselves using the outline on page 3 at the bottom three bullets or bottom four bullets in your report on page 3?

A. Sure.

Q. Okay. And did you testify that the speed at which Mr. Dukes was going from the crest of the hill to the point of impact was not relevant in determining your opinions?

A. I don't believe I did.

Q. Okay. I got a little garbled at that point. Was the speed relevant in your opinion?

A. I mean, I used a speed of 55 miles an hour for the avoidance calculations for him. You know, I'm

assuming that he's going that fast based on the testimony of the tractor trailer that's following him.

Q. Did you see any testimony in the documents you've read that Mr. Duke was traveling between 65 and 70 miles an hour just before he ran over the motorcycle?

A. Not that I can recall, not from anybody from as good a perspective as somebody, you know, trailing immediately behind.

Q. If there were testimony that he was traveling between 65 and 70 miles per hour just before the impact, how would that affect your calculations in your report as to his avoidance time?

A. He would cover, you know, more feet per second, so he would be traversing that hundred feet in a faster period of time.

Q. He would have less avoidance time; correct?

taken, I guess that's a possibility. But I think the situation is a complex one.

Q. Yeah. And I went on the Internet and pulled up y'all's Web site where you set out kind of what you've told me that y'all do. And one of the things that you're often asked to determine is nighttime visibility and what, on your Web site, is referred to as nighttime visibility analysis. And that is one of the things that y'all do; right?

A. Sometimes, yes.

Q. And, of course, when I printed it out, I cut off half the paragraph, so I'm not going to make it an exhibit. But it does state that typically in a nighttime visibility analysis, quote, we perform a visibility study on a night that duplicates the moon phase -- then I cut off a word of two -- closed quote, and then, quote, additionally, we would consider the sun and moon timetables

corresponding to the time of the accident. Vehicles, pedestrians, or other objects of the same type as those involved in the accident are also used, closed quote.

Now, y'all didn't do any of that in this case to determine the nighttime visibility; right?

A. No.

Q. And then, quote, state-of-the-art quality video equipment is often used to document and duplicate what can be seen by the naked eye, closed quote. And y'all didn't do that either; right?

A. No, we did not perform a nighttime test in this case.

Q. Let me mark as Plaintiff's 10 -- I don't have a paper clip, but it's two pages.

(Whereupon, Plaintiff's Exhibit 10 was marked for identification.)

Q. (BY MS. HINSON AMBROSE:) I'll work it out with Buzzy, and then he'll tell you. How is that?

A. Sounds great.

Q. Would you explain to me what a nighttime visibility analysis is?

A. Essentially it's a good amount of effort. I mean, essentially, you have to get the roadway blocked off, you know, the same kind of vehicles out there, if not the same vehicle, and try to match moon phase, time after sunset, all these kinds of things to try as best you can to duplicate conditions, rain, which makes it difficult.

Q. And you did not do an analysis like this in this case; correct?

A. That's correct.

Q. Can you tell me why? If you answered this, I'm sorry. I didn't hear it.

A. You know, it's quite an undertaking. And trying to coordinate

all this and try to match a light rain condition, you know, with ten people's schedules and things like, it's much easier to do if there's no rain, if there's things that are a little more controllable.

Q. I'm going through my notes again. But do you agree that the circumstances of this case with it being raining likely it was too difficult to reproduce the conditions so that you could perform your nighttime visibility analysis?

A. It makes it very difficult. I'm not saying it can't be done, but, I mean, you'd have to pick out a day, get everybody lined up, and then everybody goes up there. If it doesn't rain, you can't do it.

Q. I understand. I'm not trying to put words in your mouth.

A. I'm trying to answer your question. I don't know what the next

question is.

Q. No. You did. It's fine. Like I said, I wasn't trying to put words in your mouth. I was just trying to -- and you did answer my question.

A. Okay.

MS. HINSON AMBROSE: That's all I have. Thank you.

MR. WHITT: I've got a couple more.

MR. SPARROW: I do too.

MR. WHITT: Okay. Go ahead.

REEXAMINATION BY MR. SPARROW:

Q. I meant to ask you a minute ago when you were digging around in there, but will you pull just a couple of pictures out of the Champion vehicle since we've got the motorcycle in here now?

A. (Witness complies.)

Q. Do you have one for the front? And these were taken, I'm assuming, on